

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Original) A microarray comprising a support having a plurality of discrete regions having a biopolymer spotted thereon, wherein attached to said biopolymer in each of said regions is a ligand that can be the same or different from a ligand in any other of said discrete regions, and wherein the concentration of said ligand in said discrete regions is substantially normalized.
2. (Original) The microarray of claim 1, wherein said support is selected from the group consisting of glass, polystyrene, PDVF membranes, nylon membranes, and polycarbonate slides.
3. (Original) The microarray of claim 1, wherein said biopolymer is a member selected from the group consisting of oligosaccharides, proteins, polyketides, peptoids, hydrogels, polylactates and polyurethanes.
4. (Original) The microarray of claim 1, wherein said biopolymer is attached to said support via noncovalent interactions.
5. (Original) The microarray of claim 4, wherein said noncovalent interactions are selected from the group consisting of hydrogen bonding, van der Waals interactions, hydrophobic interactions, hydrophilic interactions and combinations thereof.
6. (Original) The microarray of claim 1, wherein said biopolymer is attached to said support via covalent interactions.
7. (Original) The microarray of claim 1, wherein said ligand is selected from the group consisting of amino acids, peptides, proteins, sugars, lipids, nucleic acids, small

organic compounds, pharmaceutical agents, candidate pharmaceutical agents, natural or synthetic antigens, and combinations thereof.

8. (Original) The microarray of claim 1, wherein said ligand is attached to said biopolymer via chemoselective ligation.

9. (Original) The microarray of claim 1, wherein said biopolymer is agarose, and said support is glass.

10. (Withdrawn) The microarray of claim 1, wherein said biopolymer is human serum albumin, and said support is polystyrene.

11. (Currently amended) The microarray of claim 1, wherein the ~~difference in concentration between any two~~ in said discrete regions varies is less than 50%.

12. (Currently amended) The microarray of claim 1, wherein the ~~difference in concentration between any two~~ in said discrete regions varies is less than 20%.

13. (Currently amended) The microarray of claim 1, wherein the ~~difference in concentration between any two~~ in said discrete regions varies is less than 5%.

14. (Withdrawn) A method of producing a concentration-normalized ligand array, said method comprising:

(a) forming a ligand-modified biopolymer by attaching a ligand to a functionalized biopolymer via chemoselective ligation; and

(b) spotting an aliquot of said modified biopolymer mixture onto each of a plurality of discrete regions on a solid support to produce a concentration-normalized ligand array.

15. (Withdrawn) The method of claim 14, wherein said method further comprises, prior to step (b), the following step:

(a)(i) combining said ligand-modified biopolymer with a biopolymer solution to form a modified biopolymer mixture.

16. (Withdrawn) The method of claim 14, wherein said solid support is selected from the group consisting of glass, polystyrene, PDVF membranes, nylon membranes, and polycarbonate slides.

17. (Withdrawn) The method of claim 14, wherein said aliquot is spotted onto said solid support under conditions sufficient to form a gel-coated surface.

18. (Withdrawn) The method of claim 14, wherein said biopolymer is a member selected from the group consisting of oligosaccharides, proteins, polyketides, peptoids, hydrogels, polylactates and polyurethanes.

19. (Withdrawn) The method of claim 14, wherein said ligand is selected from the group consisting of amino acids, peptides, proteins, sugars, lipids, nucleic acids, small organic compounds, pharmaceutical agents, candidate pharmaceutical agents and combinations thereof.

20. (Withdrawn) The method of claim 14, wherein said ligand-modified biopolymer is peptide-modified agarose and said solid support is glass.

21. (Withdrawn) The method of claim 14, wherein said ligand-modified biopolymer is peptide-modified human serum albumin and said solid support is polystyrene.

22. (Withdrawn) A method for promoting cell or tissue growth at a desired site, said method comprising contacting said site with a ligand-modified biopolymer in an amount effective to promote cellular chemotaxis and cell or tissue growth at said site, wherein said biopolymer component is a member selected from the group consisting of agarose, polylysine and polyacrylamide, wherein said ligand component is a chemotactic peptide specific for a cell surface receptor, and wherein said ligand component is attached to said biopolymer component via chemoselective ligation.

23. (Withdrawn) The method of claim 22, wherein said biopolymer is agarose.

24. (Withdrawn) The method of claim 22, wherein said site is a member selected from the group consisting of a stent, a graft, an organ, a tissue and an implant.

25. (Withdrawn) The method of claim 22, wherein said cell or tissue growth occurs *in vivo*.

26. (Withdrawn) The method of claim 22, wherein said cell or tissue growth occurs *in vitro*.

27. (Withdrawn) A method for assaying the binding of ligands to a binding partner, said method comprising

(a) contacting a binding partner with a microarray of claim 1; and

(b) determining the amount of binding that occurs between said binding partner and the ligands present in the discrete regions of said microarray.

28. (Withdrawn) The method of claim 27, wherein said microarray comprises a modified agarose biopolymer.

29. (New) A microarray comprising a support having a plurality of discrete regions having a preformed ligand-modified biopolymer spotted thereon, wherein the ligand can be the same or different from a ligand in any other of said discrete regions, and wherein the concentration of said ligand in said discrete regions is substantially normalized.

30. (New) A microarray comprising a support having a plurality of discrete regions made by

(a) forming a ligand-modified biopolymer by attaching a ligand to a functionalized biopolymer via chemoselective ligation; and

(b) spotting an aliquot of said modified biopolymer mixture onto each of a plurality of discrete regions on a solid support wherein said ligand can be the same or different from a ligand in any other of said discrete regions, and wherein the concentration of said ligand in said discrete regions is substantially normalized.